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GRACE - A new European research project on GM crop risk assessment

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GRACE (GMO Risk Assessment and Communication of Evidence) is a research project under the 7th Framework Program of the European Commission, starting in June 2012 with duration of 3.5 years. The Consortium comprises 18 partners from Europe and South Africa.

It will - a) elaborate and implement systematic, transparent and inclusive reviews of existing evidence of potential health, environmental, and socioeconomic impacts (risks and benefits) of genetically modified plants (GMPs) or food and feed derived thereof by following a harmonized framework, and - b) reconsider the design, execution and interpretation of results of animal feeding trials as well as *in vitro* studies for assessing the safety of GM food and feed.

The framework will adapt recently elaborated evidence synthesis approaches to impartially compile existing evidence of potential adverse effects caused by the deliberate release of GMPs on human and animal health, the environment and socio-economy.

The activity addresses the need for a well documented, transparent and sustainable representation of the evidence synthesis process itself and the derived results. An open access database and a "central access point" for data and information will enable risk assessors, managers, scientists and the general public to reiterate and update their evaluations and conclusions on GMPs.

Animal feeding trials and *in vitro* studies are analyzed with regard to the added value and necessity of 90–day feeding trials with whole foods. Feeding trials are compared with advanced state-of the-art analytical, *in vitro* and *in silico* tools.

The project will provide guidance for relevant, alternative *in vitro* cell-based approaches within the overall food and feed safety assessment.